

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A system for exchanging information on a network, comprising:
 - a switch coupled to a plurality of ports;
 - an address table;
 - a transient computer having an address, said transient computer coupled to one of said plurality of ports; and
 - a plurality of private networks, wherein each of said plurality of private networks is compatible with each of said plurality of ports and one of said plurality of private networks is dynamically assigned to said one of said plurality of ports in response to a detected connection to said transient computer by said switch according to said address table, wherein said transient computer communicates with said one of said plurality of private networks via said one of said plurality of ports and said switch.
2. (Previously Presented) The system of claim 1, wherein said plurality of private networks are virtual local area networks.
3. (Original) The system of claim 1, wherein said address table is stored at said switch.
4. (Previously Presented) The system of claim 1, wherein said address table includes said address to identify said transient computer.
5. (Original) The system of claim 4, wherein said address is a media access control address.
6. (Previously Presented) The system of claim 1, wherein said switch includes a wire to said one of said plurality of ports.

7. (Original) The system of claim 1, further comprising an Ethernet switch for controlling an Ethernet network.
8. (Original) The system of claim 1, further comprising a broadband connection connecting said network with an external virtual private network.
9. (Currently Amended) A method for communicating over a network from a plurality of ports, the method comprising:
 - issuing a data packet having an address from a transient computer connected to one of a plurality of ports;
 - determining one of a plurality of networks accessible by said transient computer according to an address table using said address; and
 - assigning dynamically said one of said plurality of networks to said one of said plurality of ports by a switch coupled to said plurality of ports in response to a detected connection to said transient computer, wherein said one of said plurality of ports is compatible with each of said plurality of networks and wherein said transient computer communicates with said one of said plurality of networks via said one of said plurality of ports and via said switch.
10. (Previously Presented) The method of claim 9, further comprising determining if said one of said plurality of ports is assigned.
11. (Original) The method of claim 9, further comprising accessing said address table containing said address.
12. (Original) The method of claim 11, further comprising updating said address table.

13. (Previously Presented) The method of claim 9, further comprising unassigning said one of said plurality of ports when said transient computer is disconnected from said one of said plurality of networks.

14. (Previously Presented) The method of claim 9, further comprising sending an alarm message when said address does not correspond to said one of said plurality of networks.

15. (Previously Presented) The method of claim 9, further comprising receiving data from said one of said plurality of networks at said one of said plurality of ports.

16. (Previously Presented) The method of claim 9, further comprising accessing shared resources from said one of said plurality of ports.

17. (Currently Amended) A method for assigning an external network to one of a plurality of ports using a switch, comprising:

- receiving data from said external network;
- sending a data packet to said one of said plurality of ports;
- retrieving an address from said one of said plurality of ports in response to said data packet;
- creating a virtual network correlating to said external network; and
- assigning dynamically said virtual network to said one of said plurality of ports in response to a detected connection to a transient computer according to said address, wherein said virtual network is compatible with each of said plurality of ports and wherein communication between said virtual network and said one of said plurality of ports connected to said transient computer occurs via said switch.

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18. (Original) The method of claim 17, further comprising finding said address in an address table at said switch.
19. (Original) The method of claim 17, wherein said receiving step includes receiving said data via an Ethernet hub.
20. (Currently amended) A switch coupled to a broadband connection, and connected to a plurality of ports, comprising:
an address table listing addresses that correspond to a plurality of private networks;
a switch fabric coupled to said plurality of ports to support said plurality of private networks; and
a transient computer connected to one of said plurality of ports and dynamically assigned to one of said plurality of private networks in response to a detected connection to said transient computer, wherein said one of said plurality of ports is compatible with each of said plurality of private networks, and said transient computer communicates with said one of said plurality of private networks via said one of said plurality of ports and via said switch.
21. (Original) The switch of claim 20, further comprising a memory that stores said address table.
22. (Original) The switch of claim 20, wherein said addresses are deleted and added to said address table.
23. (Currently Amended) A switch that assigns ports, said switch coupled to a computer-readable medium, said computer-readable medium having instructions stored thereon, the instructions comprising steps for:
receiving data from an external network;
sending a data packet to one of a plurality of ports connected to a transient computer;

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retrieving an address from said one of said plurality of ports in response to said data packet;

creating a virtual network correlating to said external network; and

assigning dynamically said virtual network to said one of said plurality of ports connected to said transient computer according to said address in response to a detected connection to said transient computer, wherein said virtual network is compatible with each of said plurality of ports and wherein said transient computer communicates with said virtual network via said one of said plurality of ports and via said switch.

24. (Previously Presented) The switch of claim 23, further comprising switch fabric coupling said switch to said plurality of ports.

25. (Currently Amended) A broadband connection system, comprising:
an Ethernet hub for supporting a plurality of virtual private networks; and
a switch having an address table to dynamically assign one of said plurality of virtual private networks to one of a plurality of ports connected to a transient computer according to an address table in response to a detected connection to said transient computer, wherein said one of said plurality of virtual private networks is compatible with each of said plurality of ports and wherein said transient computer communicates with said one of said virtual private networks via said one of said plurality of ports and via said switch.

26. (Previously Presented) The broad band connection system of claims 25, further comprising said plurality of ports coupled to said switch, wherein said one of said plurality of virtual private networks is assigned to said one of said plurality of ports.

27. (Previously Presented) The broad band connection system of claim 25, further comprising an address stored in said address table, said address correlating to said one of said plurality of virtual private networks.

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28. (Currently Amended) A method for exchanging information over one of a plurality of virtual local area networks at one of a plurality of ports, comprising:

coupling a transient computer at said one of said plurality of ports;

issuing a data packet having an address from said transient computer to a switch;

identifying said one of said plurality of virtual local area networks according to said address;

assigning dynamically said one of said plurality of virtual local area networks to said one of said plurality of ports in response to a detected connection to said transient computer, wherein said one of said plurality of virtual local area networks is compatible with each of said plurality of ports;

accessing said one of said plurality of virtual local area networks with said transient computer at said one of said plurality of ports via said one of said plurality of ports and via said switch; and

exchanging information over said one of said plurality of virtual local area networks from said transient computer to a virtual private network, wherein said virtual private network corresponds to said address.

29. (Previously Presented) The method of claim 28, wherein said identifying includes accessing an address table at said switch, said address table storing said address corresponding to said one of said plurality of virtual local area networks.

30. (Previously Presented) The method of claim 28, further comprising revoking access at said one of said plurality of ports when said one of said plurality of virtual local area networks is terminated.

31. (Previously Presented) The method of claim 28, further comprising blocking said transient computer from said one of said plurality of virtual local area networks when said address is not identifiable by said switch.

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32. (Currently Amended) A system for exchanging information from a plurality of ports to external private networks, comprising:

a switch coupled to said plurality of ports, said switch including an address table;

a plurality of virtual local area networks created by said switch, wherein each of said plurality of virtual local area networks is compatible with each of said plurality of ports and wherein one of said plurality of virtual local area networks is dynamically assigned to one [[a]] port of said plurality of ports according to an address in said address table in response to a detected connection to a transient computer, said transient computer coupled to said port, said transient computer including said address correlating to said one of said plurality of virtual local area networks; and

a modem coupled to said switch via an Ethernet hub, said modem to exchange information from said one of said plurality of virtual local area networks assigned to said port to an external virtual private network corresponding to said transient computer.

33. (Original) The system of claim 32, further comprising a broadband connection to said modem, said broadband connection including said external virtual private network.

34. (Original) The system of claim 32, wherein said address table is stored as a file.

35. (Previously Presented) The system of claim 32, further comprising a private port coupling said one of said plurality of virtual local area networks to said switch.